Serial No.: 09/911,621 Filed: July 25, 2001

be filled which is sprayed from above the tubular film Fmc somewhat higher, the volume of the gas to be filled in the bag B, or the volume of the bag B, is made uniform. --.

## IN THE CLAIMS:

## Please replace claims 1-2 with the following amended version:

1. (Amended) A vertical bag form-fill-seal packaging machine for forming bags by sealing a continuous tubular packaging material in which a product to be packaged is filled, for separating and ejecting each of the bags, and for ejecting the bags to a downstream device, the machine comprising:

a first transfer unit for transferring the separated bags to the downstream device,

a first drive unit for driving the first transfer unit, and

a control unit for controlling the first drive unit, such that a traveling speed of the first transfer unit is equivalent to or a little higher than a speed at which the bags are transferred to the first transfer unit.

2. (Amended) The machine as defined in claim 1, wherein the control unit controls a posture of the bags ejected from the first transfer unit.

Please cancel claims 4 and 6.

Please replace claims 7, 11, 13-16, 18, and 19 with the following amended version:

7. (Amended) The machine as defined in claim 1, wherein the first transfer unit comprises two belts for holding each of the bags in a sandwiched manner.

11. (Amended) The machine as defined in claim 24, wherein the sealing is heat-sealing,

R

 $V_U$ 

Page 5 of 21

Serial No.: 09/911,621 Filed: July 25, 2001

the vertical bag form-fill-seal packaging machine further comprising a cooling unit for spraying a cooling gas on the sealed part of each of the bags while the bags are transferred through the transfer path defined between the two belts.

- 13. (Amended) The machine as defined in claim 12, wherein the second transfer unit is a belt with a guide bar approximately orthogonal to a direction of transfer.
- 14. (Amended) The machine as defined in claim 1, further comprising a memory storage unit for storing control settings for each set of products to be packaged, wherein the control unit performs control according to the control settings stored in the memory storage unit.
- 15. (Amended) The machine as defined in claim 14, wherein at least one of the control settings to be stored in the memory storage unit is a speed of the first drive unit.
- 16. (Amended) The machine as defined in claim 15, wherein the control settings include the interval at which the bags are ejected from the first transfer unit, and

the control unit is operatively connected to the downstream device, and provides data at least on the bag ejection time interval to the downstream device.

- 18. (Amended) The machine as defined in claim 17, wherein at least one of the control settings to be stored in the memory storage unit is a speed of the first drive unit.
- 19. (Amended) The machine as defined in claim 18, wherein the control settings include the interval at which the bags are ejected from the first transfer unit, and

A

Ka

Serial No.: 09/911,621 Filed: July 25, 2001

the control unit is operatively connected to the downstream device, and provides data at least on the bag ejection time interval to the downstream device.

Please add new claims 20-30 as follows.

20. (New) A vertical bag form-fill-seal packaging machine for forming bags from a continuous packaging material received from a supply unit, filling a product to be packaged in the bags, and for ejecting the bags to a downstream device, the machine comprising:

a bag-forming/packaging unit, including

forming means for forming the packaging material received from the supply unit into a tubular shape,

pull-down means for transferring the tubular-shaped packaging material downward,

vertical sealing means for vertically sealing an overlapped part of the tubular-shaped packaging material,

transverse sealing means for transversely sealing the tubular-shaped packaging material to form the bags, and

separating means for separating and ejecting each of the bags; and an ejecting unit including

first transfer means for receiving the separated bags from the bag-

forming/packaging unit and transferring the separated bags to the downstream device,

first drive means for driving the first transfer means, and control means for controlling a posture of the bags ejected from the first transfer means by controlling the first drive means.

21. (New) The vertical bag form-fill-seal packaging machine as defined in claim 20, wherein

said control means controls an interval at which the bags are ejected from the first transfer means.



Serial No.: 09/911,621 Filed: July 25, 2001

22. (New) The vertical bag form-fill-seal packaging machine as defined in claim 20, wherein said first transfer means includes a first belt.

- 23. (New) The vertical bag form-fill-seal packaging machine as defined in claim 22, wherein the belt is inclined so that the bags move diagonally downward.
- 24. (New) The vertical bag form-fill-seal packaging machine as defined in claim 22, wherein said first transfer means further includes a second belt, the first and second belts defining a transfer passage through which the bags can be transferred.
- 25. (New) The vertical bag form-fill-seal packaging machine as defined in claim 24, wherein the transfer passage is bent such that a part of the transfer passage is inclined.
- 26. (New) The vertical bag form-fill-seal packaging machine as defined in claim 24, wherein

the ejecting unit further includes means for changing the distance between the two belts, a such that a distance between the two belts is at least partially changed.

27. (New) The vertical bag form-fill-seal packaging machine as defined in claim 20, wherein

the ejecting unit further includes:

second transfer means for receiving the bags from the first transfer unit and transferring and ejecting the bags to the downstream device, and second drive means for driving the second transfer means, and the control means further controls the second drive means.

28. (New) The vertical bag form-fill-seal packaging machine as defined in claim



Page 8 of 21

Serial No.: 09/911,621 Filed: July 25, 2001

20, wherein

the ejecting unit further includes memory storage means for storing control settings for each set of products to be packaged, and

the control means controls the first transfer means based on the control settings.

29. (New) The vertical bag form-fill-seal packaging machine as defined in claim 28, wherein

the control settings include a speed of the first transfer means.

30. (New) The vertical bag form-fill-seal packaging machine as defined in claim 28, wherein

the control settings include an interval at which the bags are ejected from the first transfer means, and

the control means provides to the downstream device the interval at which the bags are ejected from the first transfer means.

Belled